202206UECM1404OE3a

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Review of preview

Started on	Sunday, 14 August 2022, 04:41 PM
Completed on	Sunday, 14 August 2022, 04:41 PM
Time taken	7 secs
Grade	**0** out of a maximum of 10 (**0**%)

1
Marks: 1

A 7,000 loan is being repaid with regular payments of X at the end of each year for as long as necessary plus a smaller payment one year after the final regular payment. Immediately after the 12th payment, the outstanding principal is 4 times the size of the regular payment (that is, 4X). If the annual interest rate i is 8%, what is the value of X? _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 767.16
Marks for this submission: 0/1.

2
Marks: 1

The amount of principal repaid in the first payment of a 12-year loan being repaid by level payments at 7% is 400. What is the amount of loan? _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 7155.4
Marks for this submission: 0/1.

3
Marks: 1

The amount of principal repaid in the 5th payment of a 15-year loan at 4% is 213. what is the original loan? _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 3330.468
Marks for this submission: 0/1.

4
Marks: 1

James takes out a 32-year loan, which is repaid with annual payments at the end of each year. he repays the loan by making payments which are equal to X during years 1-16, 3X during year 17-24, and 2X during years 25-32. Interest is charged on the loan at an annual effective rate of i, i>0. The amount of interest repaid during year 17 is twice as much as the amount of interest repaid during year 25. Calculate i. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 0.090508
Marks for this submission: 0/1.

5
Marks: 1

A loan of L is to be repaid with 70 payments of 220 at the end of each quarter. Interest on the loan is charged at a nominal rate i, $0 < i < 1$, convertible quarterly. The outstanding principal immediately after 52th and 61th payments are 3251.75 and 1781.89, respectively. Calculate the amount of interest repaid in the 19th payment. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 147.660652
Marks for this submission: 0/1.

6
Marks: 1

A loan of 56,000 is being repaid by 27 equal annual installments made at the end of each year at 6% interest effective annually. Immediately after the 7-th payment, the loan is renegotiated as follows:

- The borrower will make 20 annual payments of K to repay the loan, with the first payment three years from the date of renegotiation.
- The interest rate is changed to 7.5% effective annually.

Calculate K. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 5511.622326
Marks for this submission: 0/1.

7
Marks: 1

Don takes out a 21-year loan of L, which repays with annual payments at the end of each year using the amortization method. Interest on the loan is charged at an annual effective rate of i. Don repays the loan with a decreasing series of payments. He repays 2,100 in year one, 2,000 in year two, 1,900 in year three, ..., and 100 in year 21. The amount of principal repaid in year three is equal to 1060.44. Calculate L. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 14807.81
Marks for this submission: 0/1.

8
Marks: 1

A loan of 300,000 is being amortized with payments at the end of each year for 16 years. If $v^8 = 0.877$, find the amount of principal repaid in the first 8 years. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 140170
Marks for this submission: 0/1.

9
Marks: 1

A loan of 7000 at a nominal rate of 24% convertible monthly is to be repaid by six monthly payments with the first payment due at the end of 1 month. The first three are x each, and the final three payments are 3x each. Determine the sum of the principal repaid in the third payment and the interest paid in the fifth payment. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 588.112534
Marks for this submission: 0/1.

10

Marks: 1

Sam borrows L for n years at an anuual effective rate of 4%, to be repaid with equal payments at the end of each year. The outstanding balance at the end of the 5th year is 1789.62 and at the end of the 6th year is 871.1. Calculate the principal repaid in the first payment. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 754.956486
Marks for this submission: 0/1.